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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,690	01/27/2004	Patrick Monney	09623C-031510US	2081
20350	7590	03/01/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			NGUYEN, ANTHONY H	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/766,690	<b>Applicant(s)</b> MONNEY ET AL.	
	<b>Examiner</b> Anthony H. Nguyen	<b>Art Unit</b> 2854	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 16-20 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### **Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 16, 17, 19 and 25 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bowles et al. (US 5,163,161) in view of Ikemori et al. (US 5,358,230).

With respect to claims 16 and 17, Bowles et al. teaches a receiver 10 having a keyboard (no numeral reference, shown in Figs. 1 and 3) which includes a volume control dial 104 disposed on the surface of the keyboard. The volume control dial includes a cylinder having an undulating surface and axis generally perpendicular to the keyboard surface (Bowles et al., Fig. 1). Bowles et al. does not teach the spring which presses against the surface of the cylinder to provide tactile feedback. Ikemori et al. teaches the conventional use of a spring 67 which presses against the surface of a cylinder 71 as shown in Figs. 16 and 17 of Ikemori et al. In view of the teaching of

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Ikemori et al., it would have been obvious to one of ordinary skill in the art to modify the keyboard of Bowles et al. by providing the spring as taught by Ikemori et al. for ease of operating a volume control dial. With respect to claim 25, note that Ikemori et al. teaches the spring having a small cylinder 66 which is smaller than the cylinder on which the spring is pressed as shown in Fig.16 of Ikemori et al. With respect to claim 1, the use of a keyboard foot coupled to an edge of a keyboard for putting a keyboard in an inclined position is well known in the art.

Claim 18 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bowles et al. in view of Ikemori et al. as applied to claims 1, 16, 17, 19 and 25 above, and further in view of Charlton (US 5,929,774).

Bowles et al. and Ikemori et al. teach all that is claimed, except for the volume control dial which is moved toward and away from the keyboard surface. Charlton teaches the power/volume control dial 34 which is moved toward or away (i.e., pressed or unpressed the key) from the keyboard surface as shown in Fig.1 of Charlton. In view of the teaching of Charlton, it would have been obvious to one of ordinary skill in the art to modify the keyboard of Bowles et al. and Ikemori et al. by providing the volume control dial as taught by Charlton for quickly turning on the volume control dial.

Claim 20 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bowles et al. in view of Ikemori et al. as applied to claims 1, 16, 17, 19 and 25 above, and further in view of Nakada et al. (US 3,902,398).

Bowles et al. and Ikemori et al. teach all that is claimed, except the photoemitter and the photodetector. Nakada et al. teaches the sound volume control device having

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a photoemitter 18 and a photodetector 19 which detects the light through the slits of the plate 15 as shown in Figs.2-3 of Nakada et al. In view of the teaching of Nakada et al., it would have been obvious to one of ordinary skill in the art to modify the the volume control dial of Trent et al. by providing the photemitter and photodetector as taught by Nakada et al. to improve the efficiency of sending a signal to a processing unit.

### ***Response to Arguments***

Applicants' arguments filed on January 26, 2006 have been fully considered but they are not persuasive of any error in the new ground(s) rejection(s).

Applicant argues that Bowles et al. and Ikemori et al. fail to teach the keyboard having the volume control dial as recited in claim 16. Specifically, applicant argues that Ikemori et al. does not teach the spring which provides tactile user feed back and that there is no motivation to combine the reference.

However, as explained above, Bowles et al. teaches clearly the keyboard having the cylindrical volume control dial which includes an undulating surface and generally perpendicular to the keyboard surface. Ikemori et al. teaches the conventional use of the spring 67 that is pressed against the undulating surface 71 as shown in Figs. 16 and 17 of Ikemori et al. Therefore, the combination of Bowles et al. and Ikemori et al. renders obvious the structure as recied in claims 1, 16, 17, 19 and 25.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

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where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in the art would have been well aware of the conventional of using a spring which is pressed against an undulating surface to provide tactile feedback of Ikemori et al. to be used in Bowles et al. so as to provide feedback to an user.

In response to applicant's argument that Bowles et al. and Ikemori et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bowles et al. teaches the keyboard having a volume control for computer as shown in Figs.1 and 3. While Ikemori et al. does not teach the keyboard for the computer, Ikemori et al. is reasonably pertinent art since Ikemori et al. teaches the conventional use of a spring which presses on an undulating surface. Thus, the combination of Bowles et al. and Ikemori et al. renders obvious the structure as recited.

Applicant argues that Charlton does not teach the volume control dial which is movable toward and away from the keyboard surface. Specifically, applicant argues that Charlton does not teach the spring being bias against the undulating surface to provide tactile user feedback.

As explained above, Bowles et al. and Ikemori et al. teach the volume control dial including the spring which provides tactile user feed back. Charlton teaches the power/volume control dial which is movable toward or away from the keyboard surface to turn the volume on and off. Therefore, the combination of Bowles et al., Ikemori et al. and Charlton renders obvious the structure as recited in claim 18.

Applicant argues that Nakada et al. does not teach volume control dial including a plurality of slit and the spring being bias against the undulating surface to provide tactile user feedback.

As explained above, Bowles et al. and Ikemori et al. teach the volume control dial including the spring which provides tactile user feed back. Nakada et al. teach the slits on the plate so that the photodetector 19 can detect the light from the photoemitter 18 as recited. Therefore, the combination of Bowles et al., Ikemori et al. and Nakada et al. renders obvious the structure as recited in claim 20.

### ***Conclusion***

Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE

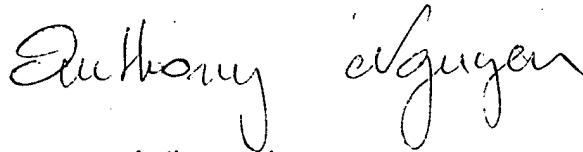
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MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168.

The fax phone number for this Group is (571) 273-8300.

A handwritten signature in black ink, appearing to read "Anthony Nguyen", is positioned above the typed name and title.

Anthony Nguyen  
2/21/06  
Patent Examiner  
Technology Center 2800